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The Blush: Literary and Psychological Perspectives

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ABSTRACT

Literary analysis of the blush in Austen's novels identifies three themes, namely the potential ambiguity of a blush, its association with modesty, and its erotic and gendered nature, issues that scarcely figure in current psychological explanations of the phenomenon. I examine these themes and compare them with current psychological accounts which assign a central place to embarrassment and, more specifically, emphasise either unwanted social attention, exposure of the self, or the blush's signalling function. Analysis of Austen's work suggests that greater attention should be paid to self-consciousness as it relates to threats to reputation, to the erotic dimension of the blush, and to potential gender differences. It should encourage researchers to be aware of limitations of psychological accounts and to expand their range of sources of information in order to enhance understanding of this elusive phenomenon.

Keywords: blushing, modesty, embarrassment, literary criticism, psychology, Jane Austen

The neglect of the blush in the psychology of emotion is puzzling particularly since it is regarded as a uniquely human emotional expression. Darwin (1872/1999) considered it worthy of an entire chapter in *The Expression of the Emotions in Man and Animals*, and emotions thought to be associated with the blush – shame and embarrassment – have been extensively discussed and researched. There are signs that this situation is changing and a growing body of theorising and empirical research is emerging (for reviews, see Crozier, 2006b; Crozier & de Jong, 2012; Leary, Britt, Cutlip, & Templeton, 1992). Evidence is accruing on several fronts: attempts to elucidate its psychophysiological basis; the development of objective measurement instruments; investigation of the specific circumstances that trigger a blush; exploration of its social functions. Yet the blush intrigued scholars long before Burgess (1839/2009) and Darwin (1872/1999) brought it

into scientific purview and the phenomenon entered the psychological domain in a systematic way (Leary *et al.*, 1992) and it remains of interest to other disciplines including cultural studies (Probyn, 2005) and brain research (Nummenmaa, Glerean, Hari & Hietanen, 2014). In this paper I consider approaches to the blush in literary criticism, specifically as it applies to the fiction of Jane Austen since it is regarded as significant in her work (Halsey, 2006; Mullan, 2012; O'Farrell, 1997; Wiltshire, 1992; Yeazell, 1991); I draw for illustrations upon two of her novels, *Emma* (first published in 1816) and *Northanger Abbey* (1818). I begin with observations by Mandeville (1732/1988) since he is frequently discussed within literary criticism in this context and there are suggestions that Austen was familiar with his writings (Knox-Shaw, 2005).

Mandeville related the blush to shame, which he defined (p. 64) as “a sorrowful reflexion on our own unworthiness, proceeding from an apprehension that others either do, or might, if they knew all, deservedly despise us”. He immediately acknowledged limitations of this definition in that we can be ashamed for others when we ourselves have no cause for shame while “innocent virgins are often ashamed, and blush when they are guilty of no crime, and can give no manner of reason for this frailty” (p. 64). He provided an example which raises questions for the psychology of the blush. If a modest woman hears obscene words uttered in her presence she will blush but she will not do so if she overhears the same words from the next room where she is sure that her presence is unknown. But if she hears something said about herself “that must tend to her disgrace, or any thing is named, of which she is secretly guilty, then ‘tis ten to one but she'll be ashamed and blush, tho' no body sees her” (pp. 65–66). Modesty, shame, guilt, involvement of the self, secrecy, discovery, being seen: all of these figure in historical and literary accounts of the circumstances of blushing yet play little part in current scientific thinking. Reading literary critics' writings on the blush in Austen's novels suggests three themes: the blush has no single meaning; it is a sign of modesty; it is inherently sexual in nature. I relate each in turn to psychological perspectives.

THE BLUSH HAS NO SINGLE MEANING

Literary critics acknowledge that reddening of the face can occur for different reasons; a blush has no single meaning. A claim by George Eliot in *Daniel Deronda* (Eliot, 1876/2009, p. 360) that “a blush is no language: only a dubious flag-signal which may mean either of two contradictories” has attracted extensive discussion. Ricks (1976, p. 53) pointed out that language itself is ambiguous and that “she [Eliot] is in danger of forgetting the extent to which this shows that a blush is like, not unlike, language”. O'Farrell (1997) enquired what Eliot meant by “the two contradictories.” Is the blush dubious because there is more than one meaning or because there are only two? And how does this claim support the assertion that

the blush is no language? O'Farrell (1997) characterised the blush as "somatic speech" (p. 51) and wrote of its "legibility" and "indexical capacity" (p. 45); the blush, like speech, is capable of conveying different messages. In Fanny Burney's *Evelina*, (Burney, 1778/2008, p. 81) a character admits that he has "known so many different causes of a lady's colour, such as flushing, — anger, — *mauvaise honte*, — and so forth, that I never dare decide to which it may be owing." In short, there is no straightforward read-out from somatic response to mental state or emotion. Halsey (2006) listed some of the causes of reddening explicitly labelled in Austen's novels: agitation, anger, astonishment, cheerfulness, confusion, consciousness, displeasure, indignation, receiving praise, shame and surprise; to which can be added mortification (*Emma*, p. 113; page numbers refer to Austen, 1816/1996). As there are different grounds for colouring there are different interpretations and the reddening can be judged to be appropriate, attractive, immature or foolish.

This diversity offers narrative opportunities for the novelist. In two of the principal plotlines in *Emma*, the eponymous character is misled by a blush. She accuses Harriet Smith of blushing (p. 46) but, influenced by her own plans rather than attending to the immediate cause of this reaction — Harriet's mention of Mr Martin's good qualities — immediately reaches the erroneous conclusion that someone other than Martin is the reason. In the second plotline a blush accompanying a smile leads her to mistake Jane Fairfax's character: "This amiable, upright, perfect Jane Fairfax was apparently cherishing very reprehensible feelings" (p. 201).

It is arguable that the ambiguity of interpretation serves artistic purposes rather than indicating any systematic difficulties we experience in identifying a blush. Nevertheless, the diversity in interpretations raises questions. Austen uses a range of words such as blush, flush, colour and glow to describe reddening in an emotional context. This indicates that some emotion is being experienced and the reader looks to the context to decide what the nature of this emotion is. Austen chooses her words carefully. For example, when Miss Bates realises that she is being mocked by Emma (p. 306) she is said to blush. Describing her as flushing or colouring would encourage a different interpretation of her response and of her character, leading the reader to think in terms of anger or indignation, whereas blushing implies that Miss Bates has insight into her tendency to gossip too much. A similar instance occurs when Emma blushes when she is criticised by Mr. Knightley for her insolence towards Miss Bates (p. 309); she feels shame rather than, for example, resentment. On other occasions the text refers to colouring even though the context suggests that the character is blushing, thus Emma colours (p. 317) when her father, in the presence of Mr. Knightley and unaware of her recent rudeness, praises her for her attentiveness to Miss Bates, praise which Emma knows is undeserved. The number of different words available to describe blushing is an issue for current research. It is unclear psychophysiologically how to distinguish the blush from the changes in complexion that accompany anger or indignation although phenomenologically

these are quite different.¹ Secondly, research relies heavily on ordinary language, assuming that blushing is a distinct and singular phenomenon without acknowledging that the existence of a single word for a phenomenon is no guarantee of this. Leary *et al.* (1992) distinguished between classic and creeping forms of the blush and future investigations might find it valuable to make additional distinctions or construct alternative categorisations. Finally, in many contexts blushing may simply serve as a metonym for shame or embarrassment – “You make me more ashamed of myself than I can bear... I deserve to be under a continual blush all the rest of my life.” (*Emma*, p. 280) – and this has implications for research designs that invite participants to describe their experience of blushing.

“THE SANCTION OF MODESTY”

Modesty has long been associated with the blush (Darwin, 1872/1999; Ellis, 1927; Halsey, 2006; Mandeville, 1732/1988; Yeazell, 1991). The word has several meanings in English, relating variously to shame, humility, being unassuming, moderation, simplicity and limited in amount. Darwin (1872/1988, pp. 332–333) identified two meanings relevant to blushing – humility and sensitivity to breaches of social etiquette – but concluded that these mental states have little in common other than their tendency to elicit a blush.

We can ask whether Austen and her critics overemphasise the importance of modesty because it was central to the courtship practices of the time she wrote about. Marriage was a crucial institution for a woman because it entailed her complete economic dependence on her husband. It was incumbent on women – who were expected to adopt the more passive role in courtship – to make a smart choice, which required having opportunities to encounter potential husbands in mixed company while at the same time maintaining an unblemished reputation. The norms of modesty afforded her protection from ribaldry or unwanted approaches by men who in turn were expected to adjust their behaviour to her presence in order to respect her virtue and prevent her from being sullied by any indelicacies she might accidentally come across. Modesty was also considered to make the woman more attractive to potential husbands, not simply because of the good reputation she would bring to the marriage but because of its erotic promise: sexual feeling restrained is more arousing than sexuality openly displayed; modesty is an “erotic double agent...her very resistance serves to entice man as well as to restrain him” (Yeazell, 1991, p. 22). On the other hand, the reserve and bashfulness associated with a modest demeanour were undesirable in a man since they restricted his capacity to take the initiative in courtship and suggested his inability to defend his wife’s interests in the future.

A blush provides an effective means of conveying modesty; it is visible, uncontrollable and cannot be feigned and thereby provides evidence of sincerity and innocence. Catherine Moreland, an unworldly teenager and a newcomer to

society – the “most innocent blusher in Austen’s fiction,” Mullan (2012, p. 266) suggests – is responsible for sixteen of the eighteen blushes in *Northanger Abbey*. Yet in *Emma*, Harriet, also an unsophisticated teenager, who blushes whenever there is any allusion to a potential marriage partner, is no more likely to blush (eight instances) than are Jane Fairfax (nine) and Emma Woodhouse (twelve), suggesting that innocence is not the sole reason to blush. Jane blushes whenever there is a risk that her secret engagement to Frank Churchill may be uncovered. Emma blushes with modesty on occasion, for example she colours when Churchill enquires after Mr Knightley (p. 391) and blushes when discussing the prospect of marriage with Knightley (p. 379) but she mostly does so when she reflects on past foolish mistakes, particularly her misinterpretation of Jane’s blushes as signs that she has had a secret liaison with a Mr Dixon: “Churchill...named the name of Dixon.—Emma blushed, and forbade its being pronounced in her hearing” (p. 390).

The concept of modesty plays little part in psychological accounts of blushing. An exception is Ellis (1927), who, in contradiction of Darwin’s observation that the concept does not map onto a distinct psychological state, defined modesty as a form of fear that prompts concealment and is distinguished from related emotions such as shyness, shame and bashfulness because of its special connection with “the consciousness of sex”. He associates modesty specifically with sexual characteristics, behaviours and thoughts and with the shame of bringing taboo subjects into the open. Yet it is unconvincing to distinguish modesty in terms of sexual content since this is also evident in shame, embarrassment, and so on.

Modesty in the sense of humility is associated with a blush: We colour when we are complimented, congratulated, thanked, or praised, particularly in public. This poses challenges to psychological accounts. First, explaining blushing in such circumstances is awkward, albeit not insurmountable, for those theories of embarrassment that regard threats to self-esteem as its basis (Babcock, 1988). It can be explained more parsimoniously by theories foregrounding fluster and uncertainty how to behave (Silver, Sabini and Parrott, 1987) nevertheless the fluster explanation has difficulty with circumstances where we blush if congratulated yet not flustered: A blush here is viewed positively as an appropriate response and is not necessarily evidence of lack of poise.

Second, consider Mandeville’s example of the modest woman who does not blush if she merely overhears impropriety yet does so if she overhears some criticism of herself. If Mandeville is correct the presence of others is necessary for the blush of modesty, whereas it is not when we blush with shame to recall some past mistake or hear others mention it. Mandeville argued that modesty, impropriety, shame and the blush are all concerned with honour and reputation and their loss. What counts as immodesty or impropriety depends on the norms and values of a given society and varies from one society to another, within the same society at different times or among different constituent groups. The blush is surely not necessarily a response to actual loss of honour or reputation but to

the risk or anticipation of such loss. We blush because our foolishness might be seen or our hidden motive might be uncovered. We blush when we are praised or receive an award because our reputation is at stake; it becomes focal. We blush for someone else because we empathise with their loss of reputation even if they lack the insight (or do not share the relevant value) to blush for themselves. Nevertheless we don't necessarily blush simply by thinking about such threats; they must be palpable in some sense, suggesting that adoption of an "observer-perspective" on the self has to be salient, as Taylor (1985) has argued in her account of shame.

THE EROTIC BLUSH

The view that the blush is sexual in nature is common in literary criticism. Wiltshire (1992, p. 18) proposed that the blush in Austen's novels "conveys the presence of desire, and especially of female desire, while dramatising it, precisely as propriety." Elsewhere (p. 78) he claims that "the blush of modesty, of embarrassment, inevitably entails the consciousness of sexuality, of eroticism, however veiled or denied." Claims for the erotic nature of the blush are also made by Gay (1979) and O'Farrell (1997). Austen uses a blush to indicate the sexual attraction between characters or their awareness of the sexual implications of an encounter, a conversation or the contents of a letter. Almost all of the blushes in *Emma* occur in the context of relationships between the sexes. This usage is considered by critics to go beyond the embarrassment associated with threats to modesty to encompass the blush's erotic nature, for example O'Farrell (1997) writes that "the contagious blush assists at an eroticized bonding; the somatic union always threatened or promised by the confusion of blushing bodies" (p. 52); the blush as "signifier of the erotic" (p. 111) and "a source of erotic charge" (p. 113).

Within this tradition modesty is a quality particularly identified with women, and the blush, as the expression of modesty, is "eroticized and gendered" (Yeazell, 1991, p. 8) and the "realm of the female" (Wiltshire, 1992, p. 79). Mullan (2012, p. 270) observes that women are described as blushing in Austen's novels whereas men are described as colouring, which is a broader term covering the flushing of anger, indignation and physical exercise. This usage has the effect of leaving it open that a man might be experiencing any of these feelings, protecting him from being thought "unmanly" by reserving the "feminine" term for women characters. Mullan provides the example of Mr. Knightley in *Emma* (p. 236); nevertheless there are exceptions, for example Henry Tilney "blushed for the narrow-minded counsel he was obliged to expose" (*Northanger Abbey*, p. 235; page numbers refer to Austen, 1818/2006); not all reasons to blush are reserved for women.

Everyday observation shows that blushing is not restricted to women. It may be that "the realm of the female" refers to how the blush was exploited in the novels of Austen's era and might not be evident in the fiction of other periods or in

everyday life. Austen's novels focus on courtship and marriage in polite society, in particular the experience of women, and do not embrace the worlds, for example, of work or commerce, or the professions in politics, the judiciary, church and universities that were closed to women in that era. Women were constrained in what they were permitted to say or even supposed to think about sexual matters. Yet this cannot be the complete explanation since sexual themes are not specific to that era and are frequent in surveys of contemporary fiction and in research participants' recollections of blushing episodes (Crozier, 2012). Nevertheless, there are many instances in both kinds of sources where the circumstances of blushing are not obviously connected to a sexual context however broadly conceived, for example the episode when Emma is rude to Miss Bates. A diary study of participants' descriptions of a sample of social encounters reported by Rot, Moskowitz and de Jong (2015) found that blushes were not restricted to women or sexual themes. While women participants blushed more often than men and romantic encounters elicited more blushes than did interactions with friends the differences are relative.

That the blush is sexual in origin has not figured much in psychological theorising. An exception is psychoanalysis, which offers an explanation of the origins of the blush in sexual repression (for example, Karch, 1971; see also Ellis, 1927) where attention is drawn to the apparent similarity between the rush of blood to the face and to the sexual organs in arousal. Thus Ellis (1927) set out the position, which he credits to Hall (1897), that "an erection is a blushing of the penis...the sexual blush is a vicarious genital flushing of blood, diverted from the genital sphere by an inhibition of fear...it is an irradiation of sexual erethism that the blush may contain an element of pleasure." These speculations have not led to systematic research into the nature of blushing and the comparison of a blush to an erection fails to take the physiological differences into account. Apart from the obvious difference in the target of increased blood flow, the blush is under sympathetic nervous system control, mediated by vasodilator neurons in the superior cervical ganglia region of the spinal cord, whereas penile and clitoral erection is mainly under parasympathetic control, mediated by the sacral spinal cord.

Alternatively we can speculate that the blush originated as a sexual signal, perhaps to indicate the blusher's readiness for sex or to communicate sexual interest in another. The attractiveness of the blush might reflect these origins; it is a sign of sexual interest, which can be triggered by the presence of a desirable person, by realisation that an encounter has a sexual dimension, or even by the mention of, or allusion to sexual topics. Historical evidence from literature and the study of portraits suggest that red cheeks have long been regarded as sexually attractive (Crozier, 2006a). The white face/ red cheeks combination is widespread in portraiture across centuries, countries and styles, and has been explained not only in terms of the rosy complexion's connotations of youthfulness, good health and being in one's sexual prime but also in terms of colour

symbolism such as white for purity, red for love. Thus, for example, in his survey of the meanings of colour in the middle ages, Pleij (2004, p. 51) concluded that the medieval “model of feminine beauty demanded a red-and-white color scheme for the face.”

Accounts of the signalling function of the blush focus on its role in dominance-submission relationships (van Hooff, 2012) rather than its function as a sexual signal. The blush is regarded as a human equivalent of the submission or appeasement signals that are found in other species even though such signals in those species seldom involve colour changes. In psychological research (for example, Miller, 1996) the thesis that the blush is a sign of a breach of modesty treats erotically charged situations as potential sources of embarrassment rather than being in themselves the prime cause of the blush. One problem with these positions, as with all accounts of the blush that emphasise its communicative function, is that the blush is less visible among people with darker skin complexion, which presumably limits its value as a signal. We have scarcely any empirical evidence from cross-cultural studies on the emotional meanings of the blush or its role in interpersonal encounters that adds to the observations collected from informants across the world by Darwin (1872/1999). An exception is Strathern (1977), who interviewed natives of Papua New Guinea about their experience of “shame on the skin” and found that this response was named by a word similar in meaning to, but not directly translatable into the English shame and was triggered by public exposure of what ought not to be exposed, for example being observed in sexual intercourse or toileting. In a rare experimental study Drummond and Lim (2000) reported no differences between Caucasian and Indian participants on physiological measures while performing an embarrassing task although the former reported greater self-consciousness and believed that they blushed more intensely than the latter. These subjective differences in the absence of physiological differences warrant further investigation. Among people with dark complexions the blush is experienced through felt temperature change in the skin and may be apparent in subtle changes in colouring; this issue and its implications for subjective experience and perceptions of the blush also deserve closer examination.

We can query what is gained by speculation about the sexual origins of the blush since it is an issue that cannot easily be resolved. While it is arguable that the ubiquity of sexual themes in literary accounts of blushing merely reflects literature’s fascination with sexual relationships and experiences there is empirical evidence that these are commonly associated with the blush (Crozier, 2012; Miller, 1996; Rot, *et al.*, 2015). In any case the assertion that the blush is “erotized and gendered” surely goes beyond the implication that women blush more frequently than men do and we should consider the possibility that the blush has somewhat different meanings for each gender, meanings that are context dependent: Are there gender differences in interpretations of reasons for blushing, the impact of blushing on the individual’s self-concept or the inferences that are made about the blusher’s character?

In order to evaluate the contribution of literary sources to contemporary scientific accounts it is useful to provide a brief overview of psychological theories. Leary and Toner (2012) identify three candidates: communicative and remedial theory – a blush communicates the blusher's acknowledgement of and apology for wrongdoing and in doing so aims to put matters right (Castelfranchi & Poggi, 1990); unwanted social attention, whether the attention is positive, negative or neutral (Leary *et al.*, 1992); exposure theory, where the blush is a reaction to the threat of disclosure of something the blusher would prefer to keep hidden (Crozier, 2000). Leary and Toner conclude that while each explanation accounts successfully for some aspects of the blush, none is completely satisfactory. In particular, the first two have problems in explaining instances where thinking a secret thought in public is sufficient to trigger a blush while the third downplays the communicative function of the blush and offers no answer to the question why the blush has evolved. To these limitations one should add the problem for the first two theories of instances where people blush while alone and the challenge for explanations that emphasise the primacy of the blush's communicative function that is posed by the observation that the blush is less visible among people with darker skin complexion.

The communicative property of the blush and thinking a secret thought in public as its cause might be regarded as testing points for these theories, the one focusing on the visibility of the blush and the other on the reaction to circumstances that threaten to bring the private self into the public realm. Austen's novels afford insights in this arena. The blush is potentially informative to observers. It communicates in the sense of conveying a character's emotion by nonverbal means as in the series of episodes related to Jane Fairfax's secret engagement. She blushes whenever anything is said that touches on this. There is nothing inherently wrong in the engagement although its revelation would suggest that she and Churchill are less than candid. Her colouring has the disadvantage of giving rise to speculation that would not otherwise occur; different observers, notably Emma and Knightley, make different inferences about the cause of her colouring. More generally, while colouring alerts observers to a potential issue it leaves the precise nature of this open to interpretation; the blush can indicate guilt or shame or merely a foolish mistake. This can be advantageous, and not only to the blusher, by providing everyone present with options for responding appropriately in order to manage any predicament that has arisen and which might threaten the group's social bonds. For example, a blush of guilt can be read as embarrassment brought about merely by the nature of a topic raised and this interpretation might be useful to everyone present in circumstances where pursuing the issue of guilt would threaten the smooth running of the encounter or risk a disruption of social bonds. Dissembling can facilitate re-interpretation: Mr Knightley attempts to mask his blush by pretending to struggle with his gaiters (p.236); Emma's

recognition of the cause of his colouring (his sudden awareness of his feelings for her) would introduce a profound, and, as far as he knew at the time, possibly unwelcome, change in their relationship.

Openness to interpretation is consistent with cognitive and componential theories of emotion (e.g. Scherer, Mortillaro, & Mehu, 2013) but the value of Austen's writings is in demonstrating the blush's implications for social interaction. Most instances in the novels elaborate on a blush in various ways, referring to observers' interpretations or using the incident to advance the plot or provide insight into character. This is one of the strengths of fiction as a rich source of material for analysis in comparison with the isolated incidents of the kinds typically elicited in empirical research. It locates the blush in the context of character and considers its consequences for current and future social relationships and in doing so offers a more nuanced picture of the blush in social life.

Instances of private thoughts in public are frequent in the novels and are not peripheral or exceptional as causes of blushing. Emma blushes when she is reminded of her misjudgements of Jane Fairfax or her unkindness to Miss Bates as does Harriet when she acknowledges her foolishness in treasuring a keepsake (p. 280). Characters blush when they are alone. In *Northanger Abbey* (pp. 156, 163) Catherine blushes while alone when she realises the foolishness of what she is doing. What has changed in the situation to induce the blush is not the presence of another person since none appears, but a shift in her consciousness. She is the judge of her own conduct; nevertheless she imagines how this could look from the outside. Mandeville's description of the modest woman who blushes to hear criticism of herself even though she cannot be seen provides another example. One way to understand these episodes is to assume that blushing is associated with a heightened state of self-consciousness, where we view ourselves through the eyes of another and imagine how our conduct would appear to the other. Often this is triggered by an actual observer, consistent with the unwanted social attention hypothesis, as when Catherine imagines while dancing that she is the object of the critical attention of Henry Tinley and another gentlemen (*Northanger Abbey*, p. 73). Nevertheless, the presence of actual observers is not essential. Nor is self-reflection sufficient; a successful theory has also to account for circumstances where we think about ourselves without necessarily blushing. Neither is the truth of an imputed transgression essential, as Castelfranchi and Poggi (1990) have argued; it is sufficient that the criticism is credible in the light of the evidence to hand. Mandeville's modest woman need not believe what she overhears said about her but she has to believe that it is reasonable for her critics to make that judgment. Such instances can be difficult to elicit in surveys, which tend to generate more memorable or dramatic occasions than do literary sources (Crozier, 2000).

Self-consciousness has featured in scientific explanations of blushing. Darwin (1872/1999, p. 324) argued that self-attention is the "essential element" in blushing; "it is not the simple act of reflecting on our own appearance, but the thinking what

others think of us, which excites a blush". Tomkins (1963) elaborated on this to claim that self-consciousness is a product as well as a cause of the blush, arguing that awareness of the face heightens the state of self-consciousness. There is scope here for further development. Darwin's thesis can be extended beyond consciousness of physical appearance to include our sense of how we present ourselves to others. Harris (1990, p.69) argued that the blush is the hallmark of a mental state he labelled "cute negative public self-attention". O'Brien (2012) has presented an analysis of the mental state of "ordinary self-consciousness" in terms of focus on the self from a third-person perspective and awareness of being the object of potential evaluation by another. She suggests, as Harris does about his hypothetical state, that this state may be fundamental to shame and embarrassment and it would be valuable to develop this analysis to encompass the blush.

Awareness one's own blush may be functional. In Goffman's (1972) terms, a certain kind of self has to be projected into social life and the blush alerts the actor to a potential failure in self-presentation; concerns about reputation aren't confined to the society described by Austen. Those who blush when their secret is uncovered suffer a loss of reputation in two ways – as someone who has fallen short and as someone who is less than candid. Both create self-presentation problems.

The Limitations of Literary Sources

There are reasons to be sceptical about the value of this evidence. The situations they describe are fictional and contrived for narrative purposes. They represent common sense understanding of the blush, the author's intuition rather than evidence. In defence, an accomplished author writing within a realist tradition of the novel must be able to demonstrate convincing depictions of blushing and locate these in the context of society, social interactions, and individuals' motives and emotions. Austen's descriptions of the blush continue to strike a chord with readers, centuries after they were written and they attract the close attention of literary scholars. Of course, the convincingness of depictions and authors' abilities to manipulate readers' responses may, at least in part, reflect tropes and "novelistic codes" (Halsey, 2006, p. 236) acquired through experience in reading fiction. Yet we should not presume that contemporary scientific accounts are immune from the social and economic context in which they are produced, for example the widespread assumption that the blush is specific to embarrassment (Buss, 1980; Keltner & Buswell, 1997; Miller, 1996): "embarrassment" appears eight times in *Emma* but never in the context of blushing.

The prominence of both modesty and blushing as the "realm of the female" in literary analysis may be a consequence of culture-specific factors. Blushing was expected of women in certain circumstances. Thus Mr. Elton boasts to his listeners about the stages in his rapid courtship of his wife-to-be, "the steps so

quick, from the accidental rencontre, to...the party at Mrs Brown's – smiles and blushes rising in importance"(*Emma*, p. 151).

The concept of modesty was emphasised by Darwin and Ellis and is a focus of literary analysis of the blush but is neglected in contemporary psychology. It neatly accommodates those occasions of blushing where we are complimented, thanked or praised. Nevertheless, its use draws attention to the wider problem of the status of ordinary language terms such as modesty, shyness, bashfulness and timidity that do not map in a straightforward way onto psychological constructs and categorisations that themselves are labelled by ordinary language names. Thus there are the ongoing difficulties of deciding whether shyness is a form of shame (e.g., Tomkins, 1963) or of anxiety (e.g., Buss, 1980) or distinguishing between shame and embarrassment (Crozier, 2014). Psychological accounts treat embarrassment as a (mild) form of shame (see Crozier, 2014, for a review) or as a basic emotion in its own right (Miller, 1996). Yet, in English at least, the meaning of embarrassment has changed in relatively recent times to bring it closer to shame, historical evidence which psychological approaches including componential and appraisal theories ought to take into account.

CONCLUSIONS

What can the psychology of the blush learn from Austen and literary analysis? It warns against over-reliance on common sense notions of the blush and draws attention to the neglect of relations between the blush and other emotion-related changes in facial colouring. It suggests that the blush's openness to interpretation can be socially useful. It challenges the ready acceptance of the presumption that the blush is the expression of embarrassment, which ignores historical, literary and cross-cultural evidence for the role of shame in blushing. Private thoughts triggered by specific circumstances are common in fiction as causes of blushing and may be underestimated in empirical research and theorising. What seems common to the various circumstances of blushing in the novels is the consciousness of, as Mandeville suggested, the danger occasioned to reputation if others were to "know all" about us. It is the sudden intrusion of this thought into the mind at a moment when awareness of being the potential object of attention is salient that excites a blush. This explanation of the blush is worthy of empirical test, possibly by means of a priming paradigm where "secrets" are primed and then alluded to in conversation, by asking participants to keep a secret from exposure during interrogation, or by exploring the conditions which influence blushing during interaction with the opposite sex.

The blush has a social history as does, for example, the smile (Jones, 2014) and psychology ought to pay more attention to this. Literature provides one means of doing so. An interdisciplinary approach to the blush connects the psychology of the blush to a long history of enquiry and alerts us to oversimplification of the phenomenon. It provides a rich, nuanced picture of the part a blush plays in social life.

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NOTES

¹ Shame can quickly lead to anger, which can be directed at the self, the situation or the person who instigated the situation, and this can produce further shame, resulting in what Scheff (1987) has termed a shame-rage spiral.

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